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Attorney Docket No. P21475

In re application of: K. AYUKAWA et al.

Application No. : 09/961,365

Filed : September 25, 2001

Mail Stop Appeal Brief- Patents
Group Art Unit: 3682

For : THIN AUTOTENSIONER

Examiner: M. Charles

Mail Stop Appeal Brief- Patents

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Appeal Brief-Patents
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

Transmitted herewith is an **Reply Brief Under 41.41** in the above-captioned application.

- Small Entity Status of this application under 37 C.F.R. 1.9 and 1.27 has been established by a previously filed statement.
 A verified statement to establish small entity status under 37 C.F.R. 1.9 and 1.27 is enclosed.
 A Request for Extension of Time.
 No additional fee is required.
 Information Disclosure Statement, PTO-1449 Form and References cited.

The fee has been calculated as shown below:

Claims After Amendment	No. Claims Previously Paid For	Present Extra	Small Entity		Other Than A Small Entity	
			Rate	Fee	Rate	Fee
Total Claims: 5	*20	0	x25=	\$	x 50=	\$0.00
Indep. Claims: 1	**6	0	x100=	\$	x200=	\$0.00
IDS Fee			+180=	\$	+180=	\$180.00
Extension Fees for _____ Month(s)				\$		\$0.00
			Total:	\$	Total:	\$180.00

* If less than 20, write 20

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Please charge my Deposit Account No. 19-0089 in the amount of \$_____.

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The U.S. Patent and Trademark Office is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 19-0089.

Any additional filing fees required under 37 C.F.R. 1.16.

Any patent application processing fees under 37 C.F.R. 1.17, including any required extension of time fees in any concurrent or future reply requiring a petition for extension of time for its timely submission (37 C.F.R. 1.136(a)(3)).

Bruce H. Bernstein
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Reg. No. 29,027

Reg. #47,348

P21475.A15



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant : K. AYUKAWA et al.

Group Art Unit: 3682

Appl No. : 09/961,365

Examiner: M. CHARLES

Filed : September 25, 2001

For : THIN AUTOTENSIONER

REPLY BRIEF UNDER 37 C.F.R. § 41.41

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop AMENDMENT
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In response to the Examiner's Answer, dated January 26, 2005, to the Appeal Brief filed November 8, 2004, Appellants submit the present Reply Brief.

Appellants maintain that each reason set forth in the Appeal Brief filed November 8, 2004 for the patentability of the pending claims is correct and again respectfully request that the decision of the Examiner to finally reject claims 1-4 and 6 be reversed and that the application be returned to the Examining Group for allowance.

REMARKS

Preliminary Issues

Initially, Appellants respectfully submit that the Examiner's statement of "(7) Grouping of Claims" is incorrect. In particular, on page 2 of the Examiner's Answer, the Examiner asserts that the "rejection of claims 1-4 and 6 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7)".

However, Appellants note that effective September 13, 2004, 37 C.F.R. § 1.92-196 have been removed. New rule 37 C.F.R. § 41.37 has been added to generally incorporate the requirements of former Rule 192, with some changes. In particular, the grouping of claims requirement of former Rule 192(c)(7) is removed. See particularly Federal Register, Vol. 69, No. 155, paragraph bridging pages 49962 and 49963. Instead, Rule 41.37 requires that, in "Section (vii) Argument" of the Appeal Brief, each ground of rejection must be treated under a separate heading. For each ground of rejection applying to two or more claims, the claims may be argued separately or as a group. When multiple claims subject to the same ground of rejection are argued as a group by appellant, the Board may select a single claim from the group of claims that are argued together to decide the appeal with respect to the group of claims as to the ground of rejection on the basis of the selected claim alone. Any claim

argued separately should be placed under a subheading identifying the claim by number. See Rule 41.37 (c)(1)(vii) Argument.

In the Appeal Brief filed November 8, 2004, Appellant has argued each of claims 1-4 and 6 separately and has placed each such claim under a subheading identifying the claim by number, as required by Rule 41.37(c)(1)(vii). Accordingly, it is respectfully submitted that the Examiner is incorrect in stating that the rejection of claims 1-4 and 6 stand or fall together because appellant's brief does not contain a statement that this grouping of claims does not stand or fall together and reasons in support thereof. Since each of claims 1-4 and 6 has been argued separately and placed under a subheading identifying the claim by number in accordance with Rule 41.37 (c)(1)(vii), it is respectfully requested that each of claims 1-4 and 6 be considered separately.

Additionally, Appellants respectfully submit that the Examiner has applied a new ground of rejection in the Examiner's Answer without designating the rejection as a new ground of rejection. New rule 37 C.F.R. § 41.39(a)(2) provides that an Examiner's Answer may include a new ground of rejection. Further, under 37 C.F.R. § 41.39(b), if an Examiner's Answer includes a rejection designated as a new ground of rejection, then appellant must, to avoid sua sponte dismissal of the appeal as to the claims subject to the new ground of rejection, either (a) request that prosecution be reopened or (b) maintain the appeal by filing a reply brief.

In the Examiner's Answer, "Grounds of Rejection", the Examiner states that claims 1-4 and 6 are rejected under 35 U.S.C. § 103(a) as set forth in the Final Official Action mailed May 11, 2004. However, in the Examiner's Answer, "Response to Argument", page 4, the Examiner cites U.S. Patent No. 6,332,374 to SOMEDA et al. for the teaching that "when the belt is under tension the angle of rotation of the arm increases the reaction to the torsion spring and thus the damping force also becomes larger". The SOMEDA et al. patent has not been previously cited or referred to in any rejection or in any other way during the prosecution of the present application. Therefore, the present rejection of claims 1-4 and 6 in the Examiner's Answer is, in fact, a new ground of rejection, not designated us such. Accordingly, this rejection is improper and withdrawal thereof is respectfully requested.

Substance of the Examiner's Arguments

The "Grounds of Rejection" on page 3 of the Examiner's Answer relies on the same references previously applied to reject the claims. It is respectfully submitted that the Appeal Brief filed November 8, 2004 has fully addressed the previous arguments made by the Examiner with respect to the applied references. Accordingly, Appellants limit the substantive remarks of the present Reply Brief to an overview of the relevant features of the pending claims addressed in the Examiner's Answer and to addressing the "Response to Argument" section of the Examiner's Answer.

In this regard, Appellants submit that the prior art fails to teach or suggest an autotensioner including a torsion coil spring in which the torsion coil spring is “attached eccentrically to the axial center of said base, one end of said torsion coil spring is connected to said base and the other end of said torsion coil spring is connected to said rocking arm, and said rocking arm being supported to be able to be displaced relative to said base, such that a first damping force acting on said rocking arm when said belt is tensioned is relatively larger than a second damping force acting on said rocking arm when said belt is slack” as recited in claim 1 of the present application. In particular, as recognized by the Examiner in the Final Official Action mailed May 11, 2004, the YASUHITO et al. document fails to disclose a torsion coil spring attached eccentrically to the axial center of the base. Further, contrary to the Examiner’s position, it is respectfully submitted that the KOTZAB et al. patent fails to teach or suggest a torsion coil spring in which “a first damping force acting on said rocking arm when said belt is tensioned is relatively larger than a second damping force acting on said rocking arm when said belt is slack”.

In the Examiner’s Answer, the Examiner has stated that “the axial center of the base of KOTZAB is not necessarily the rotational center and thus the axial center is an imaginary line passing through the symmetrical center of the base. In reference to KOTZAB, the axial center of the base is offset from the rotational center of the base and it can be seen that the spring is concentric to the rotational center but eccentric to the axial center. In addition,

since the axial center of the base does not coincide with the rotational center the maximum spring force will be directed to the arm”. The Examiner has not previously referred to two different centers of the base, namely an “axial center” and a “rotational center”. In any event, the Examiner has not provided any explanation for nor pointed to any teaching in the KOTZAB patent or in the prior art for the Examiner’s conclusion that “since the axial center of the base does not coincide with the rotational center the maximum spring force will be directed to the arm”. Moreover, the Examiner has failed to provide an explanation of the import of the conclusion that “since the axial center of the base does not coincide with the rotational center the maximum spring force will be directed to the arm” in relation to the language of claim 1. In particular, even assuming, arguendo, that the Examiner’s unsupported statement that “since the axial center of the base does not coincide with the rotational center the maximum spring force will be directed to the arm”, were considered correct, the Examiner has not explained how the claim language would read on this feature of KOTZAB. Accordingly, it is respectfully submitted that the prior art, including YASUHITO et al. and KOTZAB, fail to teach or suggest the subject matter claimed and that the rejection of claims 1-4 and 6 under 35 U.S.C. § 103(a) is improper for at least the above reasons and withdrawal thereof is respectfully requested.

Further, in the Examiner’s Answer, the Examiner states that “the damping force is a function of the frequency and the frequency is a function of the load. Thus, when the load

increases the twisting angle and the frequency increases and thus the damping force increases. Therefore, when the belt is tight the load on the arm increases resulting in a larger damping force on the arm. It is known that when the belt is slack the load on the arm decreases thus the frequency decreases resulting in a lower damping force". The Examiner has not previously referred to frequency, the damping force as a function of frequency, the frequency as a function of the load, or an increase in load increasing the twisting angle and the frequency, and thus increasing the damping force. In any event, the Examiner has not provided any explanation for nor pointed to any teaching in the KOTZAB patent or in the prior art for the Examiner's statement that "the damping force is a function of the frequency and the frequency is a function of the load. Thus, when the load increases the twisting angle and the frequency increases and thus the damping force increases. Therefore, when the belt is tight the load on the arm increases resulting in a larger damping force on the arm. It is known that when the belt is slack the load on the arm decreases thus the frequency decreases resulting in a lower damping force". Accordingly, it is respectfully submitted that the prior art, including YASUHITO et al. and KOTZAB, fail to teach or suggest the subject matter claimed and that the rejection of claims 1-4 and 6 under 35 U.S.C. § 103(a) is improper for at least the above reasons and withdrawal thereof is respectfully requested.

Further, in the Examiner's Answer, the Examiner states that "it should be noted when the belt is under tension the angle of rotation of the arm increases the reaction to the torsion

spring and thus the damping force also becomes larger (see U.S. Patent No. 6,332374 to Someda et al., (col. 5, lines 25-30)”. The Examiner has not previously cited nor referred to SOMEDA et al., nor to any teachings therein. In any event, the SOMEDA et al. patent discloses an accelerator position sensor including a fixed member 1, a rotary member 2, and torsion springs 3 between the fixed member 1 and the rotary member 2. Additionally, the SOMEDA et al. patent discloses that the damping force becomes larger when the angle of rotation of the rotary member 2 is increased and the reaction of torque of the torsion springs 3 becomes larger. However, the SOMEDA et al. patent fails to teach or suggest a torsion coil spring attached eccentrically to the axial center of the base. Further, even assuming, arguendo, that the SOMEDA et al. patent teaches a larger damping force as asserted by the Examiner, the Examiner has failed to provide an explanation for or pointed to any teaching in any of the prior art for the Examiner’s conclusion that the YASUHITO et al. and KOTZAB documents teach the claimed autotensioner including a torsion coil spring in which the torsion coil spring is “attached eccentrically to the axial center of said base, one end of said torsion coil spring is connected to said base and the other end of said torsion coil spring is connected to said rocking arm, and said rocking arm being supported to be able to be displaced relative to said base, such that a first damping force acting on said rocking arm when said belt is tensioned is relatively larger than a second damping force acting on said rocking arm when said belt is slack” as recited in claim 1. Accordingly, it is respectfully

submitted that the prior art, including YASUHITO et al. and KOTZAB, fail to teach or suggest the subject matter claimed and that the rejection of claims 1-4 and 6 under 35 U.S.C. § 103(a) is improper for at least the above reasons and withdrawal thereof is respectfully requested.

Therefore, Appellants again submit that the applied art of record fails to disclose or suggest the unique combination of features recited in Appellants' claims 1-4 and 6 under 35 U.S.C. § 103(a). Accordingly, Appellants respectfully request that the Board reverse the decision of the Examiner to reject claims 1-4 and 6 under 35 U.S.C. § 103(a) and remand the application to the Examiner for allowance.

Thus, Appellants respectfully submit that each and every pending claim of the present application meets the requirement for patentability under 35 U.S.C. § 103(a), and that the present application and each pending claim are allowable over the prior art of record.

Respectfully submitted,
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March 28, 2005
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